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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

SHERMAN, STEPHEN G

ART UNIT	PAPER NUMBER
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2629

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/553,352	Applicant(s) TOKIMOTO, TOYOSHI	
	Examiner STEPHEN G. SHERMAN	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the amendment filed 11 August 2009. Claims 1-25 and 27 are pending. Claim 26 has been cancelled.

Response to Arguments

2. Applicant's arguments filed 11 August 2009 have been fully considered but they are not persuasive.

On pages 14-20 of the response the Applicant argues the rejection of claims 1-25. First on pages 14-16 of the response the Applicant argues the rejection of independent claims 1, 11, 20 and 22 by arguing that the proposed modification is improper and would render Oguma unsuitable because the center device taught by Maeda is not a remote control and thus the combination would lack the necessary channel switch signal. The Examiner respectfully disagrees. By the Applicant's arguments, anyone with a TV using a remote control would be unable to get a set-top box from their cable company because it would render the TV inoperable for its intended purpose. The truth of the matter is, the center device of Maeda is not used to replace the remote control of Oguma but rather the remote would send signals to the receiver of Maeda which then will send the signals to the TV. Thus the proposed modification will not render Oguma unsuitable for its intended purpose as Oguma will still function properly in combination. Therefore, the rejection is proper and is maintained.

On pages 17-19 of the response the Applicant argues the rejection of claims 7, 14, 21 and 23 stating that Oguma does not describe of encoding data and therefore does not generate a first time stamp when the image data is encoded. The Applicant then argues that while Maeda teaches encoding it doesn't teach timestamps. The Examiner respectfully disagrees. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). If Maeda teaches of encoding all of the image data, then the timestamps created by Oguma that are generated when the image data is switched, then in combination it will be generated when the image data is encoded.

On pages 19 and 20 the Applicant argues that the new claim 27 is not taught by the references because Oguma does not describe of how channels are switched or of a center device acknowledging a request for image switching and that Maeda also does not describe of a center device acknowledging a request for image switching, however, as explained in the rejection below, based on the combination of the two references, Oguma and Maeda teach the claimed limitations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oguma (US 6,384,868) in view of Maeda et al. (JP 2002-354064).

Regarding claim 1, Oguma discloses a display device that displays an image based on data supplied from a center device (Figure 17), the display device comprising:
a receiver receiving data from the center device (Figure 17, 502); and
a visual disturbance hiding unit that hides disturbance in the image caused by image switching, in response to the display device receiving, via the receiver, switching-related data indicating information with regard to the image switching of the image data by the center device, the switching-related data being transmitted in a case where the center device performs the image switching (Figure 17 and 18 and column 4, line 4 to column 5, line 32 explain that a mute signal is used which hides disturbance in the

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image on the account of image switching, i.e. switching the channel, when the receiver 502 receives a signal from the center device, i.e. remote control.).

Oguma fails to teach wherein the center device supplies image data to the display device.

Maeda et al. disclose of a display device that displays an image based on data supplied from a center device (Figures 1 and 2, the center device is 1 the display device is 2.).

Therefore, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to have a center device as taught by Maeda et al. to supply image data to the display device taught by Oguma in order to improve the quality of image reception/reproduction for the display device.

Regarding claim 2, Oguma and Maeda et al. disclose the display device as defined in claim 1, wherein, the switching-related data is transmitted when the center device completes the image switching (Figures 1 and 2 of Maeda in combination with Oguma will create that the image data and "switching related data" from the device 1 will be sent to the device 2 after the "image switching" is completed in the center device).

Regarding claim 3, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Oguma also discloses wherein, a period during which the visual disturbance hiding unit hides the disturbance is set in accordance with a delay time from receipt of the image data to display of the image (Figure 18 shows that the mute signal is generated between the display of the two channels during which the delay occurs between the selection of channel 3 to channel 4.).

Regarding claim 4, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Maeda et al. also disclose wherein the image data is encoded data, the display device further comprising: a decoder that decodes the image data having been encoded (Figure 2, 25), a period during which the visual disturbance hiding unit hides the disturbance being set in accordance with a period required for decoding the image data by the decoder (In combination, since the display will hide the disturbance until the channel data is ready to be displayed, then it will be hidden "in accordance" with the decoding.).

Regarding claim 5, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Oguma also discloses wherein, the visual disturbance hiding unit starts to hide the disturbance when a delay time from receipt of the image data to display of the image elapses from a time point of acquiring the switching-related data (Figure 18

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shows that the mute signal isn't generated until after a video signal CHA-4 is received until the channel selection period is started, i.e. acquiring switching related data.).

Regarding claim 6, Oguma and Maeda et al. disclose the display device as defined in claim 5.

Okada et al. also disclose wherein the image data is encoded data, and the display device further comprises:

a decoder that decodes the image data having been encoded (Figure 2, 25),
the visual disturbance hiding unit starting to hide the disturbance when a certain time elapses from a time point of acquiring the switching-related data, the certain time being shorter than the delay time by a time required for decoding the image data by the decoder (There is inherently some small delay that will occur between then the device receives the data and starts to hide the disturbance, i.e. nothing is instantaneous, and this minor delay will be smaller than the delay time.).

Regarding claim 7, this claim is rejected under the same rationale as claims 1 and 4, and furthermore Figure 18 of Oguma shows that the hiding unit stops hiding the image, i.e. the mute signal ends, in accordance with the display device receiving the image data CHB-1, i.e. a "time stamp", where this "time stamp" indicated the time related to encoding and decoding.

Regarding claim 8, Oguma and Maeda et al. disclose the display device as defined in claim 7.

Oguma also discloses wherein, a time when the visual disturbance hiding unit stops hiding the disturbance is determined in accordance with a time point of acquiring the first time stamp and a second time stamp indicating when the decoder starts to decode the image data (As explained above the hiding of the visual disturbance is done between the selection of CHB-1 from CHA-4 and thus the hiding is stopped when CHB-1 is ready to display which means that the stopping is “in accordance” with the timing of the encoding and decoding.).

Regarding claim 9, Oguma and Maeda et al. disclose the display device as defined in claim 1.

Oguma also discloses wherein, the visual disturbance hiding unit hides the disturbance of the image by stopping displaying the image (Figure 18).

Regarding claim 10, Oguma and Maeda et al. disclose the display device as defined in claim 1, further comprising:

a transmitter transmitting data to the center device; and a switching command transmission controller controlling and causing transmitter to send, to the center device, switching demand data that demands switching of the image data (In combination the remote control in Oguma, i.e. the transmission means, will send data to the center device taught by Maeda et al.).

Regarding claim 11, this claim is rejected under the same rationale as claims 1 and 10, where Maeda et al. also disclose a transmitter transmitting data to the display device (Figure 2, 15).

Regarding claim 12, this claim is rejected under the same rationale as claim 2.

Regarding claim 13, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Maeda et al. further comprising an encoder (Figure 2, 11) configured to encode the image data, the transmitter transmitting, to the display device, the image data encoded by the encoder (Figure 2, 15).

Regarding claim 14, this claim is rejected under the same rationale as claims 7 and 8.

Regarding claim 15, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Maeda et al. disclose the center device further comprising:
a receiver receiving data from the display device (Figure 2, 15);
a switching demand acquiring unit configured to acquire, via the receiver, switching demand data that demands switching of the image data (Figure 2, 13); and

an image switching controller controlling and causing the image switching unit to switch the image data in accordance with the switching demand data obtained by the switching demand acquiring unit (Figure 2, 12).

Regarding claim 16, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Oguma also discloses wherein, the image switching unit is a tuner for selecting image data of being currently broadcast (Figure 17, 505).

Regarding claim 17, Oguma and Maeda et al. disclose the center device as defined in claim 11.

Oguma also discloses wherein, the image switching unit is a selector that selects one of sets of image data supplied from outside (Figure 16, 119).

Regarding claim 18, Oguma and Maeda et al. disclose in mage display system, wherein the center device defined in claim 11 sends the image data to the display device, and the display device displays an image based on the image data (Figures 1-2 of Maeda and Figures 16-18 of Oguma.).

Regarding claim 19, Oguma and Maeda et al. disclose the image display system as defined in claim 18, wherein the display device is attachable to the center device (Inherently anything is “attachable” to anything, i.e. by using glue, tape, etc.).

Regarding claim 20, this claim is rejected under the same rationale as claim 1.

Regarding claim 21, this claim is rejected under the same rationale as claim 7.

Regarding claim 22, this claim is rejected under the same rationale as claim 11.

Regarding claim 23, this claim is rejected under the same rationale as claim 14.

Regarding claim 24, Oguma and Maeda et al. disclose a computer-readable recording medium encoded with instructions, where the instructions when executed by a computer cause the computer to perform the method recited in claim 20 (If the elements defined above carry out the steps, then there is inherently program code to do so, And since the system is physical, then the code is inherently stored on a recording medium.).

Regarding claim 25, this claim is rejected under the same rationale as claims 22 and 24.

Regarding claim 27, Oguma and Maeda et al. disclose the display device as defined in claim 1, wherein the switching-related data is data transmitted after the center device acknowledges a request for the image switching (In combination since the user

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has to push a button to change the channel using the remote, i.e. a request for the image switching, then after this occurs the center device would transmit the switching-related data to the display device.).

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN G. SHERMAN whose telephone number is (571)272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen G Sherman/
Examiner, Art Unit 2629

/Amr Awad/
Supervisory Patent Examiner, Art Unit 2629

5 October 2009